

# REVIEW OF METHODS AND APPROACHES USED TO EVALUATE HEALTH INTERVENTIONS IN NATURAL ENVIRONMENTS: A CONTRIBUTION TO THE DEVELOPING GREEN SPACE AND HEALTH EVIDENCE BASE

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**Background and aims:** The University of Highlands and Islands led a UK initiative, the “Outdoors and Health Network” (OHN) funded by the UK’s Economic and Social Research Council and Medical Research Councils in 2009/10. An emergent finding from the network was an identified gap in the critical review of the research approaches taken in evaluating health interventions in natural environments. The review aimed to provide recommendations for strengthening the research methods used to evaluate health interventions in the natural environment. Whilst the links between health and natural environments have been well documented, the most effective ways in which environments can be used to improve health remains largely elusive. By scrutinising intervention evaluations, the ways the natural environment can be utilised for health improvement will be clearer. More importantly the green space and health knowledge base will become more transparent and its current limitations and potential better understood.

**Methods:** A search strategy and inclusion criteria were developed. Data from each of the included evaluation reports was extracted into a pre-determined template, framed around five key review questions.

**Results:** Forty evaluations were reviewed. The review findings illustrate how current evaluation methods and approaches can be strengthened. Health interventions and natural environments are both complex and dynamic. The results suggest that evaluation methods are currently not complex and dynamic enough to capture and interpret the processes and outcomes relevant to health interventions in the outdoors.

**Conclusions:** Given the limitations of some methods and weaknesses in application within this area of enquiry, the review concludes that the developing knowledge base from evaluations of interventions is problematic, under-developed and under-utilised. The evidence base for green space and health could be strengthened by more effective use of mixed methods by multi-disciplinary teams; increased use of existing evidence, increased coordination of evaluation input and enhanced guidance and training.